

# EXHIBIT A

**CONTAINS CONFIDENTIAL INFORMATION**

**UNITED STATES DISTRICT COURT FOR THE DISTRICT OF  
MASSACHUSETTS**

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Civil Action No. 1:19-cv-12551 FDS

Hon. F. Dennis Saylor IV

**DEFENDANT GOOGLE LLC'S FOURTH SUPPLEMENTAL RESPONSES AND  
OBJECTIONS TO PLAINTIFF'S FIRST SET OF INTERROGATORIES (NOS. 1-10)**

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Subject to and without waiving these objections, Google identifies the following services and products that make use of Google's TensorFlow Machine Learning services:

1. Ads training and serving (Search Ads, Content Ads, Shopping Ads)
2. Search training and serving (RankBrain, DeepRank, WebAnswers)
3. YouTube (WatchNext recommendations, video processing, comment ranking and filtering);
4. Google News (headline generation);
5. Play Store (recommendation and ranking);
6. Google Photos (Visual Semantic Service);
7. Image Search (Visual Semantic Service);
8. Google Lens (Visual Semantic Service);
9. Google Docs (spelling and grammar);
10. Gmail (SmartCompose, spelling and grammar, spam filtering); Cloud AI APIs (Vision API, Natural Language API);
11. Cloud TPU;
12. Google Translate (both as a Cloud offering and a consumer product);
13. Maps (voice generation, image processing for StreetView and satellite imagery);
14. Google Assistant (voice generation);
15. Speech (voice recognition, both as a Cloud offering and a consumer product);
16. Colab (running on Cloud TPU); and
17. Kaggle (running on Cloud TPU).

**REDACTED - NOT RELEVANT TO MOTION**

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Google's responses to the foregoing interrogatories.

**RESPONSE TO INTERROGATORY NO. 10:**

Subject to and without waiving the foregoing general objections, Google responds as follows: The following five individuals have knowledge regarding Google's responses to Singular's interrogatories numbers 1 through 9: Peter Brandt, Norm Jouppi, Andrew Phelps, Andrew Swing, Jennifer Wall. Although each of these individuals possess information related to one or more of Singular's interrogatories, none are necessarily knowledgeable as to all of the interrogatory responses provided here.

Dated: February 25, 2021

By: /s/ Matthias Kamber

Gregory F. Corbett (BBO #646394)  
gregory.corbett@wolfgreenfield.com  
Nathan R. Speed (BBO # 670249)  
nathan.speed@wolfgreenfield.com  
Elizabeth A. DiMarco (BBO #681921)  
elizabeth.dimarco@wolfgreenfield.com  
WOLF, GREENFIELD & SACKS, P.C.  
600 Atlantic Avenue  
Boston, MA 02210  
Telephone: (617) 646-8000  
Fax: (617) 646-8646

Asim Bhansali (*pro hac vice*)  
abhansali@kblfirm.com  
KWUN BHANSALI LAZARUS LLP  
555 Montgomery Street, Suite 750  
San Francisco, CA 94111

Matthias Kamber (*pro hac vice*)  
mkamber@keker.com  
KEKER, VAN NEST & PETERS LLP  
633 Battery Street  
San Francisco, CA 94111-1809

*Attorneys for Defendant Google LLC*

PROOF OF SERVICE

I am employed in the City and County of San Francisco, State of California in the office of a member of the bar of this court at whose direction the following service was made. I am over the age of eighteen years and not a party to the within action. My business address is Keker, Van Nest & Peters LLP, 633 Battery Street, San Francisco, CA 94111-1809.

On **February 25, 2021**, I served the following document(s):


**DEFENDANT GOOGLE LLC'S FOURTH SUPPLEMENTAL RESPONSES  
AND OBJECTIONS TO PLAINTIFF'S FIRST SET OF  
INTERROGATORIES (NOS. 1-10)**

☒ by **E-MAIL VIA PDF FILE**, by transmitting on this date via e-mail a true and correct copy scanned into an electronic file in Adobe "pdf" format. The transmission was reported as complete and without error.

*Counsel for Plaintiff Singular Computing LLC*

Paul J. Hayes	phayes@princelobel.com
Matthew D. Vella	mvella@princelobel.com
Kevin Gannon	kgannon@princelobel.com
Daniel McGonagle	dmcgonagle@princelobel.com
Michael J. Ercolini	mercolini@princelobel.com
PRINCE LOBEL TYE LLP	singular@princelobel.com
One International Place, Suite 3700	
Boston, MA 02110	
Tel: (617) 456-8000	

Executed on **February 25, 2021**, at San Francisco, California. I declare under penalty of perjury that the foregoing is true and correct.

  
Dori Chan